DATASHEET

BCKDHA Rabbit Polyclonal Antibody

CAT. NO. APA14900

KEY FEATURES

Target	BCKDHA	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Together with BCKDHB forms the heterotetrameric E1 subunit of the mitochondrial branched-chain alpha-ketoacid dehydrogenase (BCKD) complex. The BCKD complex catalyzes the multi-step oxidative decarboxylation of alpha-ketoacids derived from the branched-chain amino-acids valine, leucine and isoleucine producing CO2 and acyl-CoA which is subsequently utilized to produce energy. The E1 subunit catalyzes the first step with the decarboxylation of the alpha-ketoacid forming an enzyme-product intermediate. A reductive acylation mediated by the lipoylamide cofactor of E2 extracts the acyl group from the E1 active site for the next step of the reaction.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to BCKDHA
Specificity	Recognizes endogenous levels of BCKDHA protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human BCKDHA
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 50 kD; Observed: 50; 40 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	2-oxoisovalerate dehydrogenase subunit alpha mitochondrial; Branched-chain alpha-keto acid dehydrogenase E1 component alpha chain; BCKDE1A; BCKDH E1-alpha
Gene Symbol	BCKDHA
Entrez Gene	593(Human); 25244(Rat)
SwissProt	P12694(Human); P50136(Mouse); P11960(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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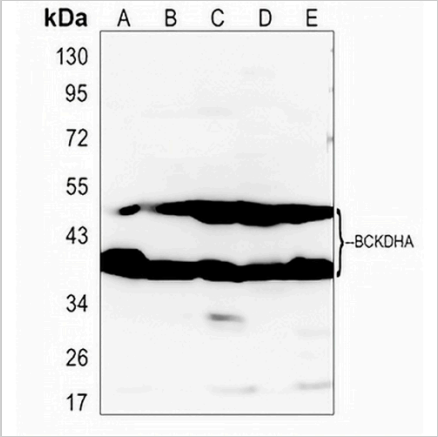
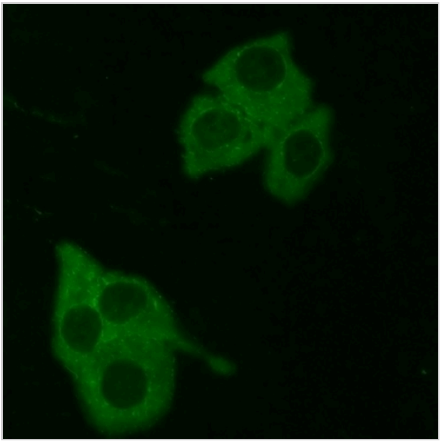
DATA



Western blot analysis of BCKDHA expression in SGC7901 (A), mouse liver (B), mouse spleen (C), rat liver (D), rat spleen (E) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 50; 40 kD)



Immunofluorescent analysis of BCKDHA staining in LO2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.